The Impact of Corporate Governance and Supply Chain Management on the Accounting and Auditing Environment

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***Abstract*- The purpose of this study is to investigate the effect of Corporate Governance and Supply Chain Management on the Accounting and Auditing Environment. The spatial scope of the research includes companies which are admitted to the Tehran Stock Exchange. This research is based on objective, applied and descriptive method, and the realm of time is between 2011 and 2016. Research includes two independent variables (supply chain management and corporate governance), two dependent variable (accounting and auditing environment), and control variables. Information is collected in both library and field. Assumptions were tested through linear regression. The results of the test showed that corporate governance and supply chain management affects the accounting and auditing environment.**

Keywords: *Auditing Environment, Corporate Governance, supply chain management, Accounting, Tehran Stock Exchange.*

1. Introduction

The most important features of joint stock companies are the separation of ownership from management and financial reports are important information sources for economic decisions that managers, investors, creditors and other users use to meet their needs. Since information is not equally shared among users, information and information asymmetry is created between managers and investors. This asymmetry provides managers with an exclusive access to some of the information. Also, motivations such as rewards, profit smoothing and avoidance rules make it possible for executives to profit from profit management [1]. Due to the importance of the impact of financial figures on performance evaluation, the issue of manipulation and management of profit figures is at the forefront of public attention, and the regulatory authorities have paid much attention to this issue and created several legal changes. Today, the importance and position of corporate governance and supply chain management for the success of companies is uncertain, as it has become more important in the light of recent events and corporate financial crises. Examining the Causes and Pathology of the Collapse of Some Major Companies, which has had a massive loss, especially for shareholders, due to the weakness of their corporate governance systems. Researches show that corporate governance and supply chain can promote corporate standards, encourage, provide and equip investors and investors, and improve their performance, and is one of the key elements in improving the company's business efficiency. Because it monitors their relationships of shareholders, the board of directors, managers and other stakeholders [3]. The International Federation of Accountants (IFAC) has defined corporate governance in 2004 as follows: "Corporate Governance and supply chain management are the set of responsibilities and practices used by the board of directors and managers with the aim of identifying a strategic route that ensures achievement of objectives, risk control and responsible use of resources"[4]. Therefore, the Audit Committee consists of independent and non-executive directors to guarantee and enhance the interests of shareholders and investors of the company as a control mechanism aimed at reducing information asymmetry between shareholders and other stakeholders. On the other hand, with the creation of the Audit Committee, the accuracy and quality of financial and accounting information have been improved, and with the provision and confirmation of transparent financial information, the responsibility and accountability of the company's management to adequately disclose and improve the quality of financial reporting is moreover controlled. The Audit Committee is one of the committees of the board of directors. Its primary role is

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to provide internal control systems created by the management and the board of directors and the audit process through the review of financial information provided to shareholders and other users of financial and accounting information, to the board of directors. Regarding the establishment of the audit committee, it is questioned whether the formation of an audit committee is linked to improving the quality and reliability of financial reporting. In this context, several studies have used the theory of agency framework to analyze the incentives of the company to form the audit committee. [5] found that the separation of management from the company's shares is lower in firms that are optionally comprised of the audit committee than companies that do not have an audit committee. The theoretical support of the formation of the audit committee can be seen in the theory of representation. Based on the theory of representation, shareholders and creditors as owners seek to maximize the usefulness of management that they serve as their agent. Assuming economic beneficial economic behavior, a potential force for opportunistic by the agent, which is at the expense of the owner. Because of the separation between ownership and management, shareholders are not able to directly observe management practices. Therefore, there are controls from shareholders that will allow managers to pursue goals that prevent the shareholders from maximizing their wealth. Audit fees have a negative relationship with audit independence and because of the direct relationship between audit independence and the accounting and auditing environment, its effect on the accounting and auditing environment is decreasing. [21] considers corporate governance and supply chain management as a set of relationships between shareholders, managers and auditors of the company, which involves establishing a control system in order to comply with the shareholders' rights and to properly implement the approvals of the assembly and prevent potential uses. The law, based on accountability and social responsibility, is a set of duties and responsibilities that must be taken up by the company's stakeholders to ensure accountability and transparency. One of the most important actors in the corporate governance system is the shareholders, because they are the suppliers of corporate capital and the maintenance of their trust is of great importance [13], [14]. Shareholders play a role through the selection of board members indirectly in the decisions of the company and the institutional and majority shareholders, inasmuch as they are able to select one or more board members, can be effective in reducing the cost of representation. In a corporate governance system, managers are responsive to the board and board of directors to shareholders and other stakeholders. Institutional ownership, the percentage of shares held with pension funds, banks, insurance companies, social security organization, investment companies and foundations and institutions of the Islamic Revolution [16]. Organizational shareholders who are proprietary investors can play an important role in overseeing executives [2], [12]. Acquiring ownership and supervision by institutional and major shareholders is a way to reduce agency problems and increase the value of the institution. Principal ownership by directors overlaps their interests with the interests of shareholders, as they manage the incentive for maximizing value activities. Major shareholders can also increase or improve the level of oversight, and thus lead to a better performance by the institution. Many researches have argued that increasing the size of large and large shareholders is limiting the issues and representing problems and giving them sufficient motivation to oversee executives. [6], [15] concluded that firms with larger institutional entities and larger shareholder holders have fewer discretionary accruals and, consequently, a higher accounting and auditing environment. Empirical evidence suggests that the role of major shareholder oversight is to improve the reporting process and reduce the conflict between executives and shareholders [8], [10]. They found institutional investors willing to engage in shareholder activities [17], [18].

2. Research Methodology

The spatial scope of the research includes companies admitted to the Tehran Stock Exchange. This research is based on objective, applied and descriptive method. The time domain also covers the period from 2011 to 2016. Research consists of two independent variables (profit management, supply chain management and corporate governance), two dependent variable (accounting and auditing environment), and control variables. Information is collected in both library and field. Assumptions were tested through linear regression [19].

3. Findings

There is a correlation between corporate governance, supply chain management and the accounting and auditing environment in companies admitted to the Tehran Stock Exchange.

The hypothesis of zero and its opposite are defined as:

H_0: There is no correlation between corporate governance, supply chain management and the accounting and auditing environment in companies admitted to the Tehran Stock Exchange.
H_1: There is a correlation between corporate governance, supply chain management and the accounting and auditing environment in companies admitted to the Tehran Stock Exchange.

$H_0: p = 0$
$H_1; p \neq 0$

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$H_0: p = 0$
$H_1; p \neq 0$

Kolmogorov-Smirnov test (KS)

To perform regression analysis, first, the normal variance test is examined by KS test.

The data follows the normal distribution: H_0

The data does not follow the normal distribution: H_1

Figure (4-8): Kolmogorov-Smirnov test

	Accounting and auditing environment	Corporate governance and supply chain management
Number of data	636.00	636.00
Average	2.65	0.2728
Standard deviation	1.95	0.26743
The absolute magnitude of the maximum deviation	0.364	0.258
Most positive deviation	0.359	0.258
Most negative deviation	-0.364	-0.154
Amount of Z	6.948	4.927
The significance level	0.000	0.000

How to judge: According to Figure 4-8, since the Sig value calculated in both the corporate governance and supply chain management variable and the accounting and auditing environment is smaller than 0.05, the assumption H_0 of the H_1 rule is accepted, that is, the data do not follow the normal distribution. To normalize these two variables, the mathematical transformation (power-law logarithm) is used. Figure (4-9) examines the assumption of the normality of the transformed variables [11].

Figure (4-9): Kolmogorov-Smirnov test

	Accounting and auditing environment	Corporate governance and supply chain management
Number of data	636	636
Average	49.0583	0.8458
Standard deviation	3.93365	0.40472
The absolute magnitude of the maximum deviation	0.062	0.071
Most positive deviation	0.062	0.062
The most negative deviation	-0.044	-0.071
The amount of Z statistics	1.183	1.04
Significance level	0.122	0.23

How to judge: According to Figure 9-4, since the significance level (Sig) is greater in corporate governance, supply chain management and the accounting and auditing environment than 0.05, the assumption H_0 is accepted and the H_1 assumption is rejected. In other words, the data has a normal distribution.

Figure (4-10): Analysis of variance of regression

Model		Sum of Squares	Degrees of freedom	Mean Square	F statistics	Significance level
1	Regression	192.638	1	192.638	12.856	0.000
	Residual	5424.282	636	14.984		
	Total	5616.919	636			

Figure 4-10 involves analyzing the variance of regression in order to check the certainty of the existence of a linear relationship between the two variables. According to this output, F = 12.856 and also the significant level is zero and less than 0.05 (0.05). Therefore, at the level of $\alpha = 0.05$, the linearity of the relationship between the dependent variable (accounting and auditing environment) and the independent variable (Corporate Governance and supply chain management) is verified.

The regression line represents the dependent variables (x) changes that are explained through the independent variable (Corporate Governance and supply chain management).

The Residual line represents the variation of the dependent variable (x), which is explained by other factors (random).

SST = SS (Regression) + SS (Residual)

The correlation coefficient can be calculated from the following relationships:

$$r^2 = \frac{SS(regression)}{SST} = \frac{192.638}{5616.919} = 0.034$$

$$r = \sqrt{r^2} \longrightarrow r = 0.185$$

Diagram (4-5): Distribution of standardized values against predicted values

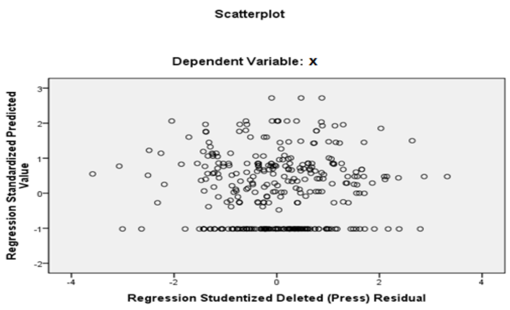

Diagram (4-6): Distribution diagram

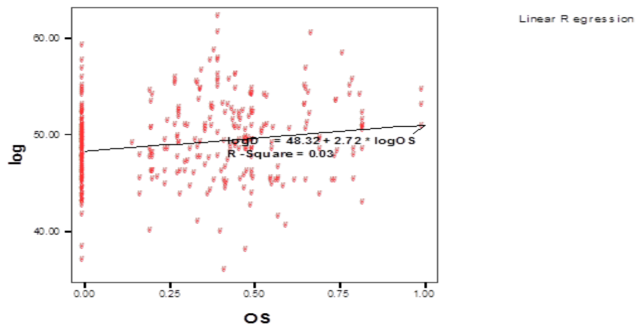

Diagram (4-7): Normality test of regression equation errors

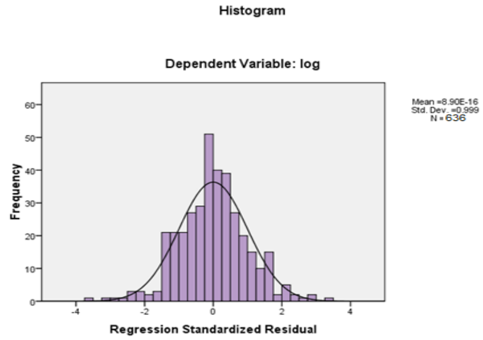

Figure 4-7 shows the normalization of errors as another regression assumption, according to this assumption, the errors of the regression equation must have a normal distribution with mean zero. On the above chart, the average value presented on the right is very small (close to zero) and the standard deviation is close to one. Therefore, by maintaining this default, we can use regression for two variables of corporate governance, supply chain management and the accounting and auditing environment.

Figure (4-11): Regression equation coefficients

Model		Not standardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t statistics	Significance level
1	(Constant)	48.315	0.29		166.585	0.000
	Corporate governance and supply chain management	2.724	0.760	0.185	3.586	0.000
2	Financial leverage	0.140	0.057	0.101	2.481	0.013
3	Cash Flow Free	0.148	0.062	0.132	3.465	0.001
4	Company's growth	0.077	0.344	0.009	0.223	0.823
5	Company's size	-0.375	0.225	-0.069	-1.670	0.096

According to Fig. 4-11 in column B, the constant value and independent variable coefficient in the regression equation are presented, and this equation is as follows:

$$Y = 48.315 + 2.724 \log X + 0.14FL + 0.148FCF$$

Figure (4-12): Correlations

		Accounting and auditing environment	Corporate governance and supply chain management
Accounting and auditing environment	Pearson correlation coefficient	1	0.185
	Significance level		0.000
	Number of data	636	636
Corporate governance	Pearson correlation coefficient	0185	1
	Significance level	0.000	
	Number of data	636	636

According to Fig. 4-12, the Pearson correlation coefficient between corporate governance, supply chain management and the accounting and auditing environment is equal to 0.185.

How to judge: A very weak correlation between the two variables. In other words, corporate governance, supply chain management and the accounting and auditing environment have a very strong positive correlation.

Figure (4-13): Correlation coefficient, determination coefficient, and Durbin-Watson test

Model	Correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Estimated error	Durbin-Watson
1	0.185	0.034	0.032	3.78094	1.634

According to Fig. 4, the correlation coefficient is 0.15. This number at the level of 5% error correlates the relationship between variable and independent variables.

The calculated determination coefficient also shows the number 0.034, which is a lower number and does not provide a good explanation of this regression.

The Durbin-Watson statistic value is 1.634 according to the diagram (4-13), which indicates that the errors are independent of each other and that there are no correlations between the errors. In other words, the assumption H_0 is accepted, and H_1 is rejected and the power of regression is used.

4. Results

The purpose of this study was to investigate the effect of corporate governance and supply chain management and its impact on accounting and auditing environment in Tehran Stock Exchange. The hypotheses were tested through linear regression. The results of the test showed that corporate governance and supply chain management affects the accounting and auditing environment. The research coincides with the findings of Yu in 2002 that the existence of a major shareholder has led to an increase in the quality of profits. In addition, [12] also endorse the statements. They believe major shareholders are forcing outsiders and other stakeholders and can collide with management. But [9] in the United States, after examining the relationship between corporate governance and supply chain management, concluded that there is an inverse relationship between the major shareholders in the company with the quality of profit and this is inconsistent with the result of the present study.

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